

# A NEW SPECIES OF *CHEIROSEIUS* AND A NEWLY RECORDED SPECIES OF *PODOCINUM* FROM CHINA (ACARI, MESOSTIGMATA, ACEOSEJIDAE, PODOCINIDAE)

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**Abstract** One new species of *Cheiroseius* Berlese, 1916, *C. fenghuangensis* sp. nov. is described from Fengcheng City in Liaoning Province, China and *Podocinum aokii* Isikawa, 1970 is newly recorded from China.

**Key words** Acari, *Cheiroseius*, *Podocinum*, new species, new record, China

## Introduction

The genus *Cheiroseius* was erected by Berlese (1916) who designated *Sejus viduus* Koch, 1939 as the type species. Until now, eighty species have been described from around the world and nine species have been described from China. The genus *Podocinum* was erected by Berlese (1882) who designated *Laelaps sages* Berlese, 1882 as the type species. Until now 27 species have been described from around the world and 8 species have been described from China.

In this paper, we describe one new species of *Cheiroseius* and one newly recorded species of *Podocinum* from China. All measurements of which range of paratypes are showed in bracket, are given in microns ( $\mu\text{m}$ ). The type specimens are deposited in the Department of Entomology, College of Plant Protection, Shenyang Agricultural University, Liaoning Province, China.

*Cheiroseius fenghuangensis* sp. nov. (Figs 1-7)

**Female.** Idiosoma nearly circular and yellow, length 400 (440), width 320 (328). Dorsal shield completed, covering all the dorsum and underlapping ventrally, entirely covered by round granules with 37 pairs of simple and long setae. Tritosternal base long, laciniae bifid and with thorns.

All plates of venter with heavily reticulation. Sternal shield length 88 (102), width 116 (120), bearing 3 pairs of simple setae; anterior margin concave, posterior margin strongly concave. 1 pair of metasternal setae present. Genital shield length 110 (104), width 126 (126), with 1 pair of simple setae. Genital shield closed to ventrianal shield. Ventrianal shield length 116 (120), width 206 (240), straight anteriorly and strongly ommate, 5 pairs of preanal setae with the same length. 1 pair of adanal setae situated at the level of middle of anal pore and with the same length as preanal setae; postanal seta far away from

anal pore, longer than preanal setae. Stigma situated between coxae III and IV, preritron extended posterior to the stigma. Tectum with 3 broad and triangular prongs. Gnathosoma with 4 pairs of hypostomal setae; gnathosomal groove with 8 rows of teeth. Movable digit of chelicera with 3 teeth, while fixed digit with 9-12 teeth.

**Male.** Unknown.

**Holotype** ♀, from soil, Fenghuang Mountain (40° 03' N, 123° 32' E), Fengcheng City, Liaoning Province, 11 Oct 2002, coll. SHI Cheng-Min, GU Li-Qiang. **Paratype** 1 ♀, from soil, same data as holotype.

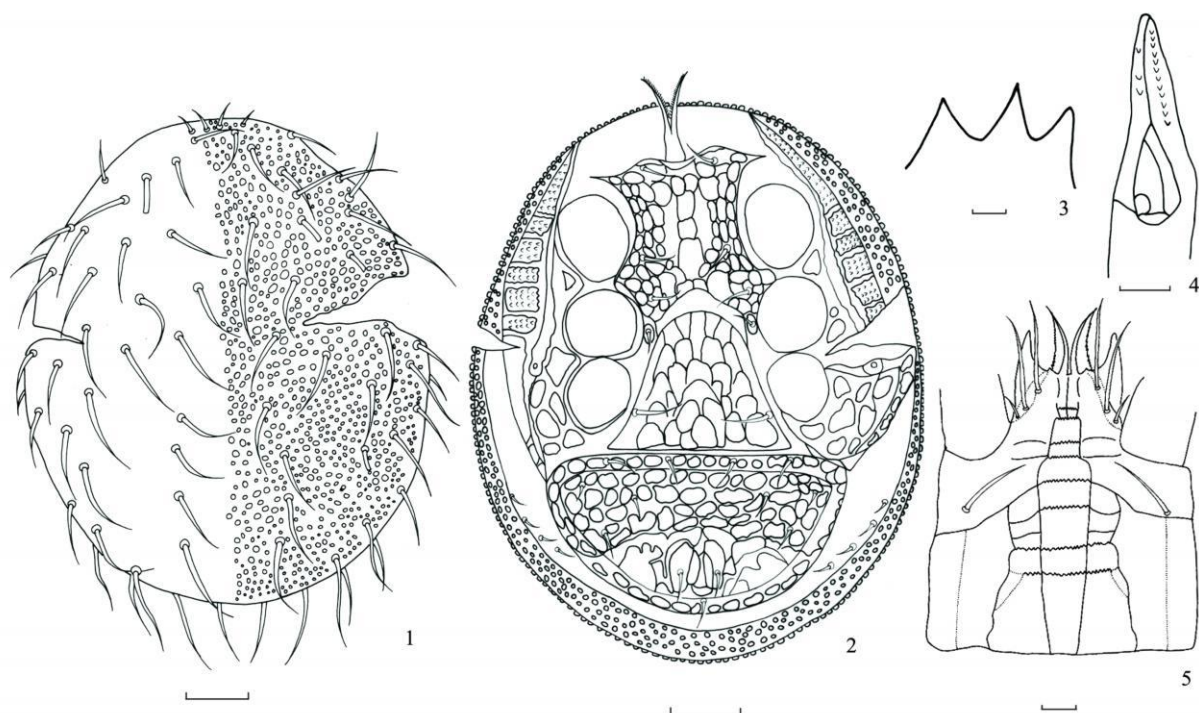
**Etymology.** The new species is named after the locality where the specimens were collected, Phoenix Mountain.

**Remarks.** The new species is similar to *Cheiroseius asiaticus* (Evans et Hyatt, 1960), but differs from the latter in having 37 pairs of dorsal setae, posterior margin of sternal shield strongly concave, ventrianal shield straight anteriorly, 5 pairs of preanal setae, movable digit of chelicera with 3 teeth, while fixed digit with 9-12 teeth, the latter species with 34 pairs of dorsal setae, posterior margin of sternal shield nearly straight, ventrianal shield concave anteriorly, 3 pairs of preanal setae, movable digit of chelicera with 2 teeth, while fixed digit with 2 teeth.

*Podocinum aokii* Isikawa, 1970. New recorded to China (Figs 8-12).

*Podocinum aokii* Isikawa, 1970. *Ann. Zool. Jap.*, 48 (2): 112-122.

**Female.** Idiosoma length 494, width 340, oval and weakly brown. Protuberances of dorsal shield bigger and less than other species of the genus. Dorsal shield with 19 pairs of setae; vertical setae far away from each other. Hysterosoma of dorsal shield bearing 7 pairs of well developed setae. Tritosternal base short, laciniae bifid. 3 pairs of sternal setae. Metapodal



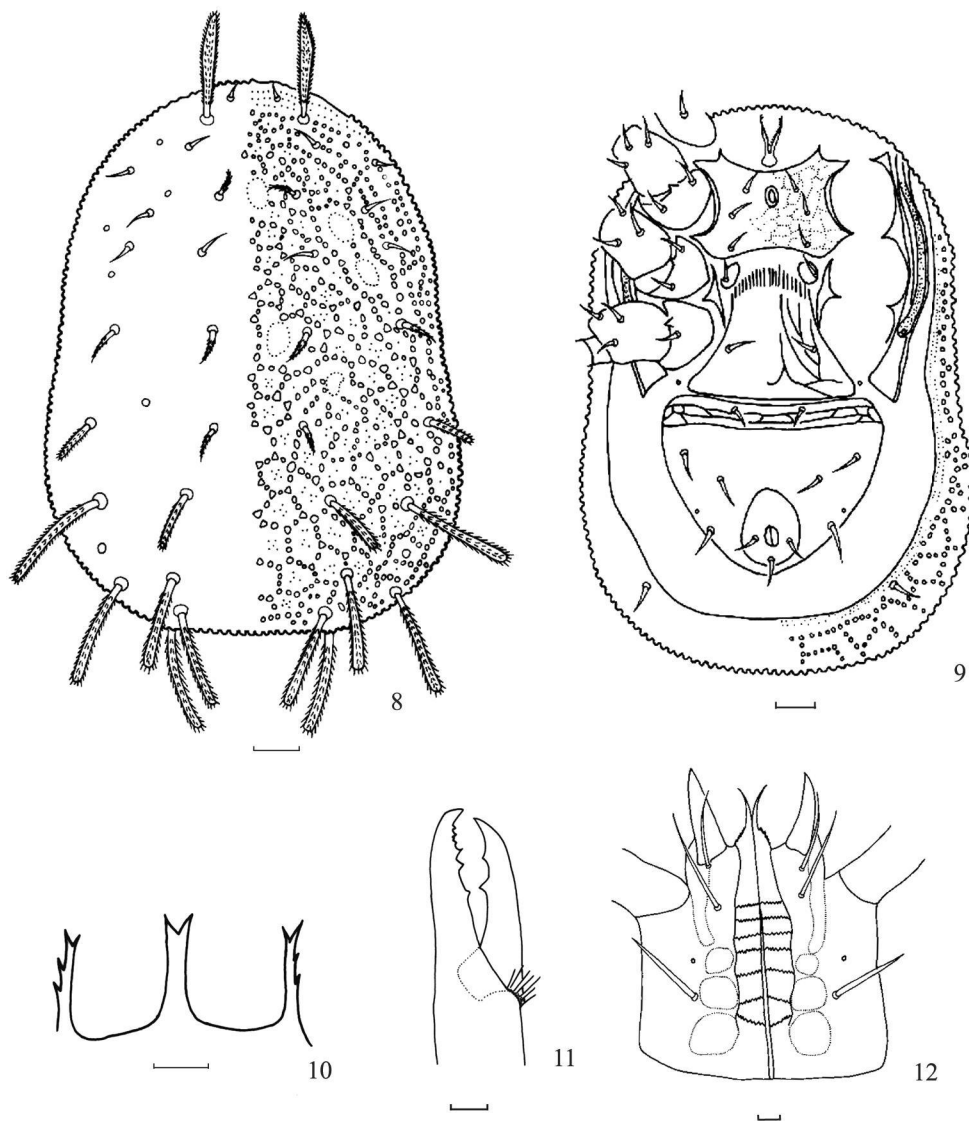
Figs 1-7. *Cheiroseius fenghuangensis* sp. nov., ♀. 1, 6 Dorsum. 2, 7 Venter. 3. Tectum. 4. Chelicera. 5. Gnathosoma.

shields with 1 pair of simple setae. Ventrianal shield subtriangular, provided with 4 pairs of preanal setae and 3 circumanal setae. Tectum with 3 prongs. Gnathosoma with 4 pairs of hypostomal setae; gnathosomal groove with 7 rows of teeth and every row with 12-16 teeth. Fixed digit of chelicera with 7

teeth, while movable digit with 2 teeth.

Distribution: Japan, China.

Material studied: 1 ♀, from soil, Laotudingzi Natural Preserve, Huanren County, Benxi City, Liaoning Province, Sep. 2005, coll. CHEN Wan-Peng, ZHANG Hong-Ming.



Figs 8-12 *Podocium aokii* Ishikawa 1970, ♀. 8 Dorsum 9. Venter 10. Tectum 11. Chelicera 12. Gnathosoma

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## 中国手绥螨属一新种和足角螨属一新纪录种 (蜱螨亚纲, 中气门亚目, 裂胸螨科, 足角螨科)

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**摘要** 记述裂胸螨科手绥螨属 1 新种凤凰手绥螨 *Cheiroseius fenghuangensis* sp. nov. 和足角螨科足角螨属一新纪录种青木足角螨 *Podocinum aokii* Isikawa 1970, 模式标本保存于辽宁省沈阳农业大学植物保护学院。

凤凰手绥螨, 新种 *Cheiroseius fenghuangensis* sp. nov. (图 1 ~ 7)

新种与粗糙手绥螨 *Cheiroseius aciculatus* (Evans et Hyatt 1960) 近似, 但可从如下特征相区别: 新种背毛 37 对, 胸板后缘强烈凹陷, 腹肛板前缘平直, 肛前毛 5 对, 螯肢定趾

9~12 齿, 动趾 3 齿; 而后者背毛 34 对, 胸板后缘近平直, 腹肛板前缘略凹陷, 肛前毛 3 对, 螯肢定趾 2 齿, 动趾 2 齿。

正模 ♀, 辽宁省凤城市凤凰山风景区土壤, 2002-10-11, 石承民, 顾丽婧采。副模 1♀, 采集记录同正模。

词源: 新种以采集地点凤凰山命名。

青木足角螨 *Podocinum aokii* Isikawa 1970 中国新纪录

1♀, 辽宁省本溪市桓仁县老秃顶子自然保护区土壤, 2005-09, 陈万鹏, 张恒明采。

国外分布于日本。

**关键词** 蜱螨亚纲, 手绥螨属, 足角螨属, 新种, 新纪录, 中国.  
**中图分类号** Q959.226